S ASEN 3300: A E C

Spring 2019, Chu & Rainville Revised: 01/11/2019

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**L** : MATH 100, Monday and Friday, 3:00 – 3:50pm

L: ITLL 2B10 Lower Plaza, Tuesday and Thursday, 8:00 – 9:50 am OR 10:00 – 11:50 am

**F**: ITLL 2B10 Lower Plaza, May 6<sup>th</sup> 7:30-10:00pm

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these critical subsystem areas. The aim of this course is to provide an overview of analog electronics, digital electronics, and communication system concepts as they are used in the aerospace industry. **T** 

. Throughout the course, students work in teams to design, build, test, and analyze electronic circuits, work with electronic instruments, interface these instruments to a computer, and implement a communications link. It is our goal that students walk away from this class with a basic understanding of instrumentation electronics, computer interfacing, and radio communications. This understanding is derived from experience building and working with real electronics in the lab.

## C O

The course is divided into three main sections: i) analog electronics, ii) digital electronics, and iii) communications. A number of the lab experiments in all three sections are designed to utilize the Analog Devices ADXL321 accelerometer. In the <u>Analog Electronics</u> section of the course we look at the accelerometer output to study vibration

equipment, how to set up a circuit, and how to perform measurements.

#### C G

The final grade is a combination of individual and group work.

T	D	Р
Individual Work (IW)	Quizzes and pre-lab assignments	10%
(60% total)	(best 11 out of 12)	
	Written Exams (2)	30%
	Practical Exams (2)	20%

to the group work.

### C

Cheating will NOT be tolerated and the CU Honor Code will be upheld.

As group work is part of this class (lab experiments and report), it is useful to clarify what is considered cheating. You are expected to perform the lab assignments as a group and dividing the workload equally. Communication within the group is encouraged. It is OK to discuss the assignments and reports with fellow students in the class as long as this is done with the intention of learning, i.e., understanding the material. Sharing results, or data analyses is permitted only under specific circumstances, when

8. Lab

behavior and the Student Code of Conduct.

# S M ,D ,H / R R

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website.

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

## H C

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the Honor Code Office website.